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CURRICULUM VITAE

LEE-LUENG FU

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CITIZENSHIP: U.S.

DATE OF BIRTH: October 10,1950

EDUCATION

1980: Ph.D. in Physical Oceanography, Joint Program in Oceanography,
Massachusetts Institute of Technology-Woods Hole Oceanographic Institution.

1972: B.S. in Physics, National Taiwan University, Taipei, Taiwan

PROFESSIONAL EXPERIENCE

Research and Administrative Positions

2009-present: JPL Fellow

1994-present: Senior Research Scientist, Jet Propulsion Laboratory

1994-2005: Lead Scientist, Ocean Science Element, Jet Propulsion Laboratory

1986-1994: Group Supervisor, Physical Oceanography Group, Jet Propulsion Laboratory

1981-1986: Member of Technical Staff, Jet Propulsion Laboratory

1980: Postdoctoral Associate, Dept. of Earth and Planetary Sciences,
Massachusetts Institute of Technology

Project/Program Positions:

2011– SWOT (Surface Water & Ocean Topography) Project Scientist, Jet
Propulsion Laboratory

2002-2016: Ocean Surface Topography Mission/Jason-2 Project Scientist, Jet
Propulsion Laboratory

1998-2013: Jason Project Scientist, Jet Propulsion Laboratory

1988-2006: TOPEX/Poseidon Project Scientist, Jet Propulsion Laboratory

Visiting Positions:

2002 – 2004: Visiting Professor, Ocean University of China, Qingdao, China

HONORS and CITATIONS

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Fellow, American Association for the Advancement of Science, 2019
Distinguished Alumni Award, 2017, National Taiwan University, Taipei, Taiwan
Distinguished Achievement Award, 2017, Chinese-American Engineers and Scientists
Association of Southern California (CESASC).
COSPAR International Cooperation Medal, 2010
Member, U.S. National Academy of Engineering, 2008
Space Systems Team Award, American Institute of Aeronautics and Astronautics, 2006
Editor Award, American Meteorological Society, 2005
NASA Outstanding Leadership Medal, 2004
Fellow, American Geophysical Union, 2003
Fellow, American Meteorological Society, 2003
Verner E. Suomi Award, American Meteorological Society, 2002.
NASA Exceptional Scientific Achievement Medal, 1996
Aviation Week and Space Technology Annual Laurel Award, 1994
NASA Exceptional Achievement Medal, 1994
Centre National d'Etudes Spatiales Medal, 1994 (awarded by the French Space Agency)
NASA Group Achievement Award, 1994
JPL Director's Research Achievement Award (Lew Allen Award), 1986

Professional Activities

NRC Earth Science Decadal Survey Climate Science Panel, 2016-2017
American Meteorological Society's Awards Nominations Committee, 2016-2019.
NRC Committee on a Framework for Analyzing the Needs for Continuity of NASA-
Sustained Remote Sensing Observations of the Earth From Space, 2013-2014.
NRC Committee on the Assessment of NASA Science Mission Directorate 2014 Science
Plan (2013)
NRC Standing Committee on Earth Science and Applications from Space (CESAS), 2012-
2017
American Meteorological Society's Oceanographic Research Awards Committee, 2012-
2015 (Chair, 2014)
National Research Council Committee for the Assessment of NASA's Earth Science
Program, 2011-2012
Associate Editor, Journal of Oceanic and Atmospheric Technology, American
Meteorological Society, January 2011 - present
NASA Ocean Surface Topography Science Team Review Panel, 2008
NASA Ocean Surface Topography Science Team Review Panel, 2004
NASA Physical Oceanography Review Panel, 2002
U.S. World Ocean Circulation Experiment Science Steering Committee, 1998-
2002
U.S. Global Ocean Observing System Science Steering Committee, 1998-2000
Jason-1 Science Working Team, Leader, 1997- present
NASA EOS Ocean Panel, 1990-1998
NASA EOS Altimeter Science Team, Leader, 1989-1992
NASA Physical Oceanography Data Active Archive Center Users Working Group, 1989-92
TOPEX/Poseidon Science Working Team, Leader, 1988-2000

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NASA EOS Science Steering Committee, 1987-1990
NASA Scatterometer Science Team, 1986-96
WOCE South Atlantic Working Group, 1986
WOCE Heat Flux Working Group, 1986
WOCE Southern Ocean Working Group, 1985
NASA Free-flying Imaging Radar Experiment Working Group, 1980-81

PROFESSIONAL SOCIETIES

American Geophysical Union
American Meteorological Society
The Oceanography Society

Post-docs supervised:

Claire Perigaud, Ichiro Fukumori, Jean-Philippe Boulanger, Randy Brown, Xiaoyun Zang, Cecile Cabanes, Josh Willis, Denis Volkov, Yongsheng (David) Xu, Clement Ubelmann, Lucile Gaultier, Yackar Mauzole, Matthew Archer

PUBLICATIONS (Refereed Articles)

1. Fu, L-L. and G. R. Flierl, 1980: Nonlinear energy and enstrophy transfers in a realistically stratified ocean. *Dynamics of Atmospheres and Oceans*, **4**, 219-246.
2. Fu, L-L., 1981: Observations and models of inertial waves in the deep ocean. *Reviews of Geophysics and Space Physics*, **19**, 141-170.
3. Fu, L-L., 1981: The general circulation and meridional heat transport of the subtropical South Atlantic determined by inverse methods. *Journal of Physical Oceanography*, **11**, 1171-1193.
4. Fu, L-L., T. Keffer, P.P. Niiler, and C. Wunsch, 1982: Observations of mesoscale variability in the western North Atlantic: a comparative study. *Journal of Marine Research*, **40**, 809-848.
5. Fu, L-L., and B. Holt, 1983: Some examples of detection of oceanic mesoscale eddies by the Seasat synthetic-aperture radar. *Journal of Geophysical Research*, **88**, 1844-1852.
6. Fu, L-L., 1983: On the wavenumber spectrum of oceanic mesoscale variability observed by the Seasat altimeter. *Journal of Geophysical Research*, **88**, 4331-4341.
7. Fu, L-L., 1983: Recent progress in the application of satellite altimetry to observing the mesoscale variability and general circulation of the oceans. *Reviews of Geophysics and Space Physics*, **21**, 1657-1666.

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8. Fu, L.-L., and B. Holt, 1984: Internal waves in the Gulf of California: observations from a spaceborne radar. *Journal of Geophysical Research*, **89**, 2053-2060.
9. Fu, L.-L., 1984: Comments on "On the determination of absolute velocities in the ocean" by M.E. Fiadeiro and G. Veronis. *Journal of Marine Research*, **42**, 259-262.
10. Fu, L.-L., and D.B. Chelton, 1984: Temporal variability of the Antarctic Circumpolar Current observed from satellite altimetry. *Science*, **226**, 343-346.
11. Fu, L.-L., and D.B. Chelton, 1985: Observing the large-scale temporal variability of ocean currents by satellite altimetry: with application to the Antarctic Circumpolar Current. *Journal of Geophysical Research*, **90**, 4721-4739.
12. Tai, C.-K., and L.-L. Fu, 1986: On crossover adjustment in satellite altimetry and its oceanographic implications. *Journal of Geophysical Research*, **91**, 2549-2554.
13. Fu, L.-L., 1986: Mass, heat, and freshwater fluxes in the South Indian Ocean. *Journal of Physical Oceanography*, **16**, 1683-1693.
14. Fu, L.-L., J. Vazquez, and M. E. Parke, 1987: Seasonal variability of the Gulf Stream from satellite altimetry. *Journal of Geophysical Research*, **92**, 749-754.
15. Fu, L.-L., and J. Vazquez, 1988: On correcting radial orbit errors for altimetric satellites using crossover analysis. *Journal of Atmospheric and Oceanic Technology*, **5**, 466-471.
16. Fu, L.-L., D.B. Chelton, and V. Zlotnicki, 1988: Satellite altimetry: observing ocean variability from space. *Oceanography Magazine*, **1**, 4-11.
17. Fu, L.-L., and V. Zlotnicki, 1989: Observing oceanic mesoscale eddies from Geosat altimetry: preliminary results. *Geophysical Research Letters*, **16**, 457-460.
18. Zlotnicki, V., L.-L. Fu, and W. Patzert, 1989: Seasonal variability in global sea level observed with Geosat altimetry. *Journal of Geophysical Research*, **94**, 17959-17969.
19. Vazquez, J., V. Zlotnicki, and L.-L. Fu, 1990: Sea level variabilities in the Gulf Stream between Cape Hatteras and 50°W: A Geosat Study. *Journal of Geophysical Research*, **95**, 17957-17964.
20. Fu, L.-L., W.T. Liu, and M. Abbott, 1990: Satellite remote sensing of the ocean. In "The Sea: Ocean Engineering Science, Vol. 9", edited by B. Le Mehaute and D.M. Hanes, pp.1193-1236, John Wiley & Sons.
21. Fu, L.-L., and R.E. Glazman, 1991: The effect of the degree of wave development on the sea-state bias in radar altimetry measurement. *Journal of Geophysical Research*, **96**, 829-834.

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22. Fu, L.-L., J. Vazquez, and C. Perigaud, 1991: Fitting dynamic models to the Geosat sea level observations in the tropical Pacific Ocean. Part 1: A free wave model. *Journal of Physical Oceanography*, **21**, 798-809.
23. Holland, W.R., V.Zlotnicki, and L.-L. Fu, 1991: Modelled time dependent flow in the Agulhas retroflection region as deduced from altimeter data assimilation. *South African Journal of Marine Science*, **10**, 407-427.
24. Fu, L.-L., M. Lefebvre, and E. Christensen, 1991: TOPEX/POSEIDON: The Ocean Topography Experiment. *EOS, Transactions, American Geophysical Union*, **72**, 369-373.
25. Fu, L.-L., I. Fukumori, and R.N. Miller, 1993: Fitting dynamic models to the Geosat sea level observations in the Tropical Pacific Ocean. Part 2: a linear, wind-driven model. *Journal of Physical Oceanography*, **23**, 2162-2181.
26. Fu, L.-L., and E.J. Christensen, 1993: TOPEX/Poseidon performance evaluated. *Eos, Transactions, American Geophysical Union*, **47**, 297, 302
27. Fukumori, I., L.-L. Fu, and R. N. Miller, 1993: Data assimilation. In "Satellite Remote Sensing of the Oceanic Environment", I.S.F.Jones, Y.Sugimori, R.W.Stewart editors, Seibutsu Kenkyusha, Tokyo, Japan, 528pp.
28. Fu, L.-L., and G. Pihos, 1994: Determining the response of sea level to atmospheric pressure forcing using TOPEX/POSEIDON data. *Journal of Geophysical Research*, **99**, 24633-24642.
29. Fu, L.-L., E. J. Christensen, C.A. Yamarone, M. Lefebvre, Y. Menard, M. Dorrer, and P. Escudier, 1994: TOPEX/POSEIDON Mission Overview. *Journal of Geophysical Research*, **99**, 24369-24381.
30. Fu, L.-L., and R. E. Cheney, 1995: Applications of satellite altimetry to ocean circulation studies:1987-1994. *Review of Geophysics*, **32**, Supplement., 213-223.
31. Fu, L.-L., and R.A. Davidson, 1995: A note on the barotropic response of sea level to time-dependent wind forcing. *Journal of Geophysical Research*, **100**, 24955-24963.
32. Chao, Y., and L.-L. Fu, 1995: A comparison between the TOPEX/POSEIDON data and a global ocean general circulation model during 1992-93. *Journal of Geophysical Research*, **100**, 24965-24976.
33. Yamarone, C.A., E.J. Christensen, and L-L. Fu, 1995: TOPEX/POSEIDON Mission – global measurements of sea level at unprecedented accuracy. *Space Technology – Industrial and commercial applications*, **15(3)**, 133-143.
34. Liu, W.T., W. Tang, and L-L. Fu, 1995: Recent warming event in the Pacific may be an El Niño. *Eos, Transactions, American Geophysical Union*, **76**, 429, 437.

35. Fu, L.-L., C. Koblinsky, J-F. Minster, and J. Picaut, 1996: Reflecting on the first three years of TOPEX/POSEIDON. *Eos, Transactions, American Geophysical Union*, **77**, 109, 111, 117.
36. Fu, L.-L., and I. Fukumori, 1996: A case study of the effects of errors in satellite altimetry on data assimilation. In "Modern Approaches to Data Assimilation in Ocean Modeling", edited by P. Malanotte-Rizzoi, Elsevier Oceanography Series, **61**, 77-96, Elsevier, New York.
37. Fu, L.-L. 1996: The circulation and its variability of the South Atlantic Ocean: first results from the TOPEX/POSEIDON Mission. In "The South Atlantic: Present and Past Circulation", 63-82, G.Wefer et al., (eds.), Springer-Verlag, 644pp.
38. Boulanger, J-P., and L.-L. Fu, 1996: Evidence of boundary reflection of Kelvin and first-mode Rossby waves from TOPEX/POSEIDON sea level data. *Journal of Geophysical Research*, **101**, 16361-16371.
39. Fu, L.-L., and R.D. Smith, 1996: Global ocean circulation from satellite altimetry and high-resolution computer simulation. *Bulletin of the American Meteorological Society*, **77**, 2625-2636.
40. Fu, L.-L., and Y. Chao, 1997: The sensitivity of a global ocean model to wind forcing: a test using sea level and wind observations from satellites and operational wind analysis. *Geophysical Research Letters*, **24**, 1783-1786.
41. Fukumori, I., R. Raghunath, and L.-L. Fu, 1998: The nature of global large-scale sea level variability in relation to atmospheric forcing: A modeling study. *Journal of Geophysical Research*, **103**, 5493-5512.
42. Gilson, J., D. Roemmich, B. Cornuelle, and L.-L. Fu, 1998: The relationship of TOPEX/POSEIDON altimetric height to steric height and circulation in the North Pacific. *Journal of Geophysical Research*, **103**, 27947-27965.
43. Shaw, P.-T., S-Y. Chao, and L-L. Fu, 1999: Sea surface height variation in the South China Sea from satellite altimetry. *Oceanologica Acta*, **22**, 1-17.
44. Kwok, R., S.H. Yueh, and L.-L. Fu, 1999: Spaceborne radar remote sensing: radar interferometry, scatterometry and altimetry. In "Encyclopedia of Electrical and Electronic Engineering", **20**, J.G. Webster, ed., pp. 15-28, John Wiley & Sons, New York.
45. Fukumori, I., R. Raghunath, L.-L. Fu, and Y. Chao, 1999: Assimilation of TOPEX/Poseidon altimeter data into a global ocean circulation model: How good are the results? *Journal of Geophysical Research*, **104**, 25647-25665.

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46. Perigaud C., C. Cassou, B. Dewitte, L.-L. Fu and D. J. Neelin, 2000: Using data and intermediate coupled models for seasonal-to-interannual forecasts. *Monthly Weather Review*, **128**, 3025-3049.
47. Ménard, Y., L.-L. Fu, P. Escudier, and G. Kunstmann, 2000 : Cruising the ocean from space with Jason-1 in the 2000's. *Eos, Transactions, American Geophysical Union*, **81**, 381, 390-391.
48. Lee, T., J.-P. Boulanger, A. Foo, L.-L. Fu, R. Giering, 2000: Data assimilation by an intermediate coupled ocean-atmosphere model: application to the 1997-98 El Nino. *Journal of Geophysical Research*, **105**, 26063-26087.
49. Brown, R.G., and L.-L. Fu, 2000: An examination of the spring 1997 mid-latitude east Pacific sea surface temperature anomaly. *Atmosphere-Ocean*, **38(4)**, 577-599.
50. Fu, L.-L., and D.B. Chelton, 2001: Large-scale ocean circulation. In "Satellite Altimetry and Earth Sciences: A Handbook for Techniques and Applications" edited by L.-L. Fu and A. Cazenave, pp. 133-169, Academic Press, San Diego, 423 pp.
51. Chelton, D.B., J. Ries, B. Haines, L.-L. Fu, and P. Callahan, 2001: Satellite altimetry. In "Satellite Altimetry and Earth Sciences: A Handbook for Techniques and Applications" edited by L.-L. Fu and A. Cazenave, pp. 1-131, Academic Press, San Diego, 423 pp.
52. Fu, L.-L., B. Cheng, and B. Qiu, 2001: 25-Day period large-scale oscillations in the Argentine Basin revealed by the TOPEX/POSEIDON altimeter. *Journal of Physical Oceanography*, **31**, 506-517.
53. Fu, L.-L., 2001: Ocean circulation and variability from satellite altimetry. In "Ocean Circulation and Climate" edited by G. Siedler, J. Church and J. Gould, 141-172, Academic Press, San Diego, Calif.
54. Li, X., Y. Chao, J. C. McWilliams, and L.-L. Fu, 2001: A comparison of two vertical mixing schemes in a Pacific Ocean General Circulation Model. *Journal of Climate*, **14**, 1377-1398.
55. Mitchum, G.T., R. Cheney, L.-L. Fu, C. Le Provost, Y. Menard, and P. Woodworth, 2001: The future of sea surface height observations, In "Observing the Oceans in the 21st Century", edited by C.J. Koblinsky and N.R. Smith, pp. 120-136, Bureau of Meteorology, Melbourne, Australia. 54.
56. Lee, T., I. Fukumori, D. Menemenlis, Z. Xing, and L.-L. Fu, 2002: Effects of the Indonesian Throughflow on the Pacific and Indian Oceans. *Journal of Physical Oceanography*, **32**, 1404-1429.

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57. Zang, X., L-L. Fu, and C. Wunsch, 2002: Observed reflectivity of the western boundary of the equatorial Pacific Ocean, *Journal of Geophysical Research*, **107** (C10), 10.1029/2000JC000719.

58. Fu, L.-L., and B. Qiu, 2002: Interannual variability of the North Pacific Ocean: the roles of boundary-driven and wind-driven baroclinic Rossby waves. *Journal of Geophysical Research*, **107**(C12), 3220, doi:10.1029/2001JC001131.

59. Fu, L.-L., 2003: Wind-forced intraseasonal sea level variability of the extratropical oceans. *Journal of Physical Oceanography*, **33**, 436-449.

60. Fu, L.-L., D. Stammer, R.R. Leben, and D.B. Chelton, 2003: Improved Spatial Resolution of Ocean Surface Topography from the T/P-Jason-1 Altimeter Mission, *Eos, Transactions , American Geophysical Union*, Vol. 84, No. 26, 241-248.

61. Ménard, Y., L-L. Fu, P. Escudier, F. Parisot, J. Perbos, P. Vincent, S. Desai, B. Haines, G. Kunstmann, 2003: The Jason-1 Mission, *Marine Geodesy*, **26**, 131-146.

62. Perbos, J, P. Escudier, F. Parisot, G. Zaouche, P. Vincent, Y. Menard, F. Manon, G. Kunstmann, D. Royer, L.-L. Fu, 2003: Jason-1: Assessment of the system performance, *Marine Geodesy*, **26**, 147-157.

63. Fu, L.-L., 2004: Latitudinal and frequency characteristics of the westward propagation of large-scale oceanic variability, *Journal of Physical Oceanography*, **34**, 1907-1921.

64. Fu, L.-L., and R. Rodriguez, 2004: High-resolution measurement of ocean surface topography by radar interferometry for oceanographic and geophysical applications, AGU Geophysical Monograph 150, IUGG Vol. 19: "State of the Planet: Frontiers and Challenges", R.S.J. Sparks and C.J. Hawkesworth, editors, 209-224.

65. Fu, L.-L., 2004: The interannual variability of the North Atlantic Ocean revealed by combined data from TOPEX/Poseidon and Jason altimetric measurements. *Geophys. Res. Letts.*, Vol. 31, No. 23, L23303, doi10.1029/2004GL021200

66. Tai, C-K, and L.-L. Fu, 2005: 25-Day period large-scale oscillations in the Argentine Basin revisited, *Journal of Physical Oceanography*, **35**, 1473-1479.

67. Song, Y.T., C. Ji, L.-L. Fu, V. Zlotnicki, C. K. Shum, Y. Yi , V. Hjorleifsdottir, 2005: The 26 December 2004 tsunami source estimated from satellite radar altimetry and seismic waves, *Geophys. Res. Letts.*, **32**, L20601, doi:10.1029/2005GL023683

68. Han, W., T. Shinoda, L-L. Fu, and J.P. McCreary, 2006: Impact of atmospheric intraseasonal oscillation on the Indian Ocean dipole during the 1990s, *Journal of Physical Oceanography*, **36**, 670-690.

69. Fu, L.-L., 2006: Pathways of eddies in the South Atlantic revealed from satellite altimeter observations, *Geophysical Research Letters*, 33, L14610, doi:10.1029/2006GL026245
70. Fu, L.-L., and P-Y. Le Traon, 2006: Satellite altimetry and ocean dynamics, *Comptes Rendus Geoscience*, 338 (14-15): 1063-1076.
71. Nerem, R.S., A. Cazenave, D.P. Chambers, L-L. Fu, E.W. Leuliette, and G.T. Mitchum, 2006: Comment pm “Estimating future sea level change from past records” by Nils-Axel Moner, *Global Planet. Change*, doi:10.1016/j.gloplacha.2006.08.002.
72. Fu, L.-L., 2007: Intraseasonal basin modes of the equatorial Indian Ocean observed from sea surface height, wind, and temperature data, *Journal of Physical Oceanography*, 37, 188–202
73. Hughes, C.W., V.N. Stepanov, L-L. Fu, and B. Barnier, 2007: Three modes of variability in Argentine Basin ocean bottom pressure, *Journal of Geophysical Research*, 112, C01011, doi:10.1029/2006JC003679.
74. Fu, L.-L., 2007: Interaction of mesoscale variability with large-scale waves in the Argentine Basin, *Journal of Physical Oceanography*, 37, 787–793.
75. Cabanes, C., T. Lee, and L-L. Fu, 2007: Mechanisms of interannual variations of the meridional overturning circulation of the North Atlantic Ocean, *Journal of Physical Oceanography*, Vol. 38, No. 2, 467-480.
76. Alsdorf, D., L-L. Fu, N. Mognard, A. Cazenave, E. Rodriguez, D. Chelton, and D. Letternmaier, 2007: Measuring the Global Oceans and Terrestrial Fresh Water From Space, *Eos, Transactions , American Geophysical Union*, 88 (24), pp. 253, 257.
77. Song, Y. T., L.-L. Fu, V. Zlotnicki, C. Ji, V. Hjorleifsdottir, C.K. Shum, and Y. Yi. 2008 : The role of horizontal impulses of the faulting continental slope in generating the 26 December 2004 Tsunami, *Ocean Modell.*, Vol. 20, 362-379. doi:10.1016/j.ocemod.2007.10.007
78. Willis, J.K., and L.-L. Fu, 2008: Combining altimeter and subsurface float data to estimate the time averaged circulation in the upper ocean, *Journal of Geophysical Research*., 113, C12017, doi:10.1029/2007JC004690.
79. Volkov, D., and L-L. Fu, 2008: The role of vorticity fluxes in the dynamics of the Zapiola Anticyclone, *Journal of Geophysical Research*, Vol. 113, C11015, doi:10.1029/2008JC004841.
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81. Fu, L-L., and R. Ferrari, 2008: Observing oceanic submesoscale processes from space, *Eos, Transactions, American Geophysical Union*, 89 (48), pp. 488.
82. Fu, L-L., 2009: Pattern and velocity of propagation of the global ocean eddy variability, *J. Geophys. Res.*, 114, C11017, doi:10.1029/2009JC005349.
83. Durand, M., L-L. Fu, D.P. Lettenmaier, D.E. Alsdorf, E. Rodrigues, and D. Esteban-Fernandez, 2010: The Surface Water and Ocean Topography mission: observing terrestrial surface water and oceanic submesoscale eddies, *Proceedings IEEE*, 98 (5), 766-779.
84. Volkov, D., L-L. Fu, and T. Lee, 2010: Mechanisms of the meridional heat transport in the Southern Ocean, *Ocean Dynamics*, Vol. 60, 791-801. DOI 10.1007/s10236-010-0288-0
85. Volkov, D., and L-L. Fu, 2010: On the reasons for the existence and the variability of the Azores Current, *Journal of Physical Oceanography*, Vol. 40, 2197-2220. DOI: 10.1175/2010JPO4326.1
86. Fu, L-L., 2010: Determining ocean circulation and sea level from satellite altimetry: progress and challenges, in "Oceans From Space", edited by V. Barale, J.F.R. Gower, and L. Alberotanza, 147-163, doi 10.1007/978-90-481-8681-5_9, Springer, New York, 374 pp.
87. Fu, L-L., D.B. Chelton, P-Y. Le Traon, and R. Morrow, 2010: Eddy dynamics from satellite altimetry: progress and challenges, *Oceanography*, Vol. 23, No. 4, 14-25.
88. Lambin, J., R. Morrow, L-L. Fu, J. K. Willis, H. Bonekamp, J. Lillibridge, J. Perbos, G. Zaouche, P. Vaze, W. Bannoura, F. Parisot, E. Thouvenot, S. Coutin-Faye, E. Lindstrom, M. Mignogno, 2010: The OSTM/Jason-2 Mission, *Marine Geodesy*, 33(S1), 4-25.
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91. Xu, Y., and L-L. Fu, 2011: Global variability of the wavenumber spectrum of oceanic mesoscale turbulence, *Journal of Physical Oceanography*, Vol. 41, 802-809.

92. Ubelmann, C., and L-L. Fu, 2011: Vorticity structures on the tropical Pacific from a numerical simulation, *Journal of Physical Oceanography*, 41, 1455-1464, DOI: 10.1175/2011JPO4507.1

93. Volkov, D., and L-L. Fu, 2011: Mechanism for the interannual variability of the Azores Current eddy energy, *J. Geophys. Res.*, 116, C11011, doi:10.1029/2011JC007271

94. Xu, Y., L-L. Fu, and R. Tulloch, 2011: The global characteristics of the wavenumber spectrum of ocean surface wind, *J. Phys. Oceanogr.*, Vol. 41, 1576-1582.

95. Ubelmann, C., and L-L. Fu, 2011: Cyclonic eddies formed at the Pacific Tropical Instability Wave fronts, *J. Geophys. Res.*, 116, C12021, doi:10.1029/2011JC007204.

96. Xu, Y., and L-L. Fu, 2012: The effects of altimeter instrument noise on the estimation of the wavenumber spectrum of sea surface height, *J. Phys. Oceanogr.*, 42, 2229-2233. doi:10.1175/JPO-D-12-0106.1

97. Fu, L-L., and R. Morrow, 2013: Remote sensing of the global ocean circulation, in *Ocean Circulation and Climate, 2nd Ed. A 21st century perspective*, pp. 83-111, Siedler, G., Griffies, S., Gould, J. and Church, J. (Eds.): Academic Press. <http://dx.doi.org/10.1016/B978-0-12-391851-2.00004-0>.

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99. Fu, L-L., and C. Ubelmann, 2014: On the transition from profile altimeter to swath altimeter for observing global ocean surface topography, *J. Ocean. Atm. Tech.* Vol. 31, No. 2. 560-568. DOI: 10.1175/JTECH-D-13-00109.1

100. Ubelmann, C., L-L. Fu, S. Brown, E. Peral, and D. Esteban-Fernandez, 2014: The effect of atmospheric water vapor content on the performance of future wide-swath ocean altimetry measurement, *J. Ocean. Atm. Tech.* **31**, 1446–1454. DOI: 10.1175/JTECH-D-13-00179.1

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